

REMARKS

Claims 1-18 have been canceled and new claims 19-35 are respectfully submitted. Claims 19-34 are method of use claims based on former claims 1-16. Claim 35 is to a kit containing the single or multiple component composition in dosage forms as either an aqueous concentrate or a solid form and packaged with an instruction leaflet as described on page 22 of the specification.

The rejection of claims 1-18 under 35 U.S.C. § 112 is deemed moot with regard the new claims. None of the terms objected to by the Examiner appear in the new claims.

The rejection of claim 17 under 35 U.S.C. § 102(b) over CENTRUM is also moot. A comparable claim is not part of new claims 19-35.

Claims 1-2, 4-5, 8-9, 14 and 18 were rejected under 35 U.S.C. 102(b) over JP-61-96959. Claim 18 is not part of new claims 19-35 thus the rejection is moot as to former claim 18.

With regard to the process claims, the Japanese reference does not anticipate these claims since it is not directed to nor does it teach the method claimed in the present invention. The Japanese reference has nothing in common with the present invention. The reference describes the preparation of fish bait or fish feed by injecting nutritive substances, such as vitamins, minerals, amino acids and the like to raw or thawed fishes for bait. The material is injected with a syringe, high-pressured liquid spray column, and is then stored, if necessary in a frozen state. In view thereof, the rejection should be withdrawn.

The present invention is directed to remove undesired material from aquarium-water by adding chemicals forming a precipitation with the added chemical without distributing the precipitation in the aquarium-water and creating turbidity and possibly also undesired skin-contact with aquatic animals. The solution of this problem is based on a sophisticated cooperation with biologically active organisms residing in the aquarium bottom ground and/or the filter material.

Many of these organisms decompose organic material and thus change or degrade organic compounds ideally to carbon-dioxide and other compounds of a low molecular weight. So, if complex forming compounds as, for example, the soluble aluminum citrate is added to the water, no precipitation occurs. However, if biologically active micro-organisms "eat" the organic part of the molecule and destroy the complex-structure with its ability to form soluble Al-complex structures, Al^{+3} ions form immediately a precipitate of Al-phosphate which adheres "in loco" to the filter-material (where it was created) or to the bottom-ground. Consequently no turbidity may occur while the undesired phosphate-ions are removed from the water as an insoluble precipitate within the solid material of the filter or bottom gravel.

The additional methods claimed by the invention use the same principle of destroying organic parts of molecules by micro-organisms and removing the released unwanted components either by forming a removable gas or an immobile precipitate. The most valuable feature of this invention is that it works also in aerobic areas of the fish tank.

The process as defined in the claims is new. No prior art document has suggested or described any teaching allowing a skilled person to use the inventor's approach of using the metabolism of micro-organisms to form waste which is removable from biological systems.

Reconsideration is respectfully requested of the rejection of claims 3, 6, 7, 10-13, 15 and 16 under 35 U.S.C. §103(a) over DE 296 17 181 in view of DE 197 04 953 and DE 195 33 994. The claims rejected are all method of use claims dependent on former claim 1. The new method of use claims are comparable and thus the present remarks address these as rejected on the same grounds. Claims 19-34 are method of use claims where claim 19 is the main claim.

The primary reference, DE 296 17 181 describes improving aquarium water or garden pond water with the target of achieving a water composition as natural as possible. Chlorine and other active chlorine compositions and hydro- and/or bio-colloids are induced. The reference does not address the problems solved or the composition employed by the present invention, i.e.,

the particular suitability of organic salts with polyvalent metal ions such as iron-, aluminum, titanium, or zirconium-cations for water treatment. Furthermore the reference does not describe the flocculation of phosphates which occurs in the filtration material or the aquarium ground material which is a significant part of the present invention. Obviously the reference deals with a completely different problem, namely improving of aquarium water with natural means, whereas the present invention primarily describes the elimination of harmful substances. Therefore the references does not teach a skilled person how to use selective biological degradation of organic compositions in order to achieve an improvement of aquarium water quality.

The secondary references are DE 197 04 953 and DE 195 33 994. The '953 reference describes a two-component flocculant for clearance and cleaning of the water in non-equipped aquariums for exhibitions with not yet activated filtration systems. It does not act as an agent for improvement of water quality itself but primarily as an agent for cleaning an aquarium that is clouded by algae and/or extreme amounts of unicellular organisms through a flocculating reaction and following filtration. Therefore the flocculation agents will be used as an auxiliary means in case of massive turbidity and not as a preventive instrument as in the present invention. More importantly the reference does not describe the biological interaction covered by the present invention because of the lacking filtering units in biological balance.

DE 195 33 994 describes a cleaning agent for wastewater containing an immense number of appropriate acids and cations. Beside the fact that a skilled person never would have the idea to fill a cleaning agent into an aquarium with fish and plants, the reference does not contain any reference for the effectiveness of the combinations of organic salts mentioned in the present invention. The biological processes and the accumulation of phosphates mentioned above are not possible during the cleaning process described in the reference.

It is clear that there is no suggestion to combine these references, especially the '994 reference which is entirely different with regards to use. The '953 has only the similarity of using flocculating agents but again for a different purpose. The combination of '953 with the primary reference fails to teach the present invention as claimed.

In view of the above, the rejection under 35 U.S.C. §103 is unwarranted and should be withdrawn.


A prompt and favorable reply is earnestly solicited.

If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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